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means for utilizing known positions of the first and second satellites at time T the position of the base station, the third set of pseudo ranges and a delay in the time of arrival of a signal transmitted from the mobile wireless transceiver to the base station to ascertain the position of said wireless transceiver.

12. The invention of claim 11 wherein said means for calculating the position of the wireless transceiver includes means for finding an intersection of a first sphere of radii around a first of the two satellites, a second sphere of second radii around a second of the two satellites, and a third sphere of third radii around said base station.

13. The invention of claim 9 wherein said means for calculating the position of the wireless transceiver includes means for finding an intersection of a first sphere of first radii around a first of the two satellites, a second sphere of second radii around a second of the two satellites, and a third sphere of third radii around said base station.

14. A method for determining a position of a mobile wireless transceiver including the steps of:

calculating Doppler shift of signals transmitted from first and second satellites, respectively, relative to a base station;

calculating a first set of pseudo ranges of the first and second satellites, respectively, relative to said base station;

sending satellite identification information, Doppler shift information, and said pseudo-range information from said base station to said wireless transceiver;

receiving, at said transceiver, said satellite identification information, Doppler shift information, and said pseudo range information from said base station;

utilizing said information received from said base station to identify a second set of pseudo ranges between said transceiver and said first and second satellites, respectively, at a time T;

sending to said base station said second set of pseudo ranges between said transceiver and said first and second satellites, respectively, along with time information for the time T; and

calculating the position of said wireless transceiver in response to said second set of pseudo ranges_{4,5} and said time information t_x.

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15. The invention of claim 14 wherein said step of calculating the position of said wireless transceiver in response to said second set of pseudo ranges and said time information for the time T includes the step of determining the distance of said wireless transceiver from said base station.

16. The invention of claim 15 wherein said step of calculating the position of said wireless transceiver includes the step of utilizing the distance between said wireless transceiver and said base station in the calculation of the position of said wireless transceiver.

17. The invention of claim 14 including the step of identifying two optimal positioning satellites.

18. The invention of claim 14 including the step of switching said mobile wireless transceiver from a first mode for effecting voice/data communication to a second mode for locating the position thereof.

19. The invention of claim 14 wherein said step of calculating the position of said wireless transceiver includes the steps of:

utilizing said second set of pseudo ranges to calculate a third set of pseudo ranges between said first and second satellites and said base station, respectively and

utilizing known positions of the two satellites at time T the position of the base station, the third set of pseudo ranges and a delay in the time of arrival of a signal transmitted from the mobile wireless transceiver to the base station to ascertain the position of said wireless transceiver.

20. The invention of claim 19 wherein said step of calculating the position of the wireless transceiver includes the step of finding an intersection of a first sphere of first radii around a first of the two satellites, a second sphere of second radii around a second of the two satellites, and a third sphere of third radii around said base station.

21. The invention of claim 14 wherein said step of calculating the position of the wireless transceiver includes the step of finding an intersection of a first sphere of first radii around a first of the two satellites, a second sphere of second radii around a second of the two satellites, and a third sphere of third radii around said base station.

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